

PART FOUR

Conclusion

Significant scientific progress can be made by a synthesis of formal and empirical modeling. The advancement of this synthesis requires the highest possible levels of communication between the two groups. Formal modelers must subject their theories to closely related tests while, at the same time, empirical modelers must formalize their models before they conduct various statistical tests. The point is not to sacrifice logically coherent and mathematical models. Rather, it is to apply that same rigor to include new developments in bounded rationality, learning, and evolutionary modeling. These breakthroughs in theory will be accomplished with the assistance of empirical models in experimental and non-experimental settings.

How will progress be measured? There are several performance indicators, including the number of articles that use formal and empirical analysis in the major professional journals. Another measurable indicator is the number of NSF grant proposal submissions by faculty and graduate students (doctoral dissertations) that use both approaches. However, the one area that may be the most difficult to measure is improvement in the quality of knowledge. In this regard, the ramifications of merging formal and empirical analysis is a transformation of how researchers think about problems and whether they take intellectual risks in synthesizing the model and testing it. When they do, the primary achievement of EITM will be a better understanding of the political and social world, more accurate predictions, and ultimately the provision of solid information to policymakers whose choices can profoundly affect citizens quality of life.